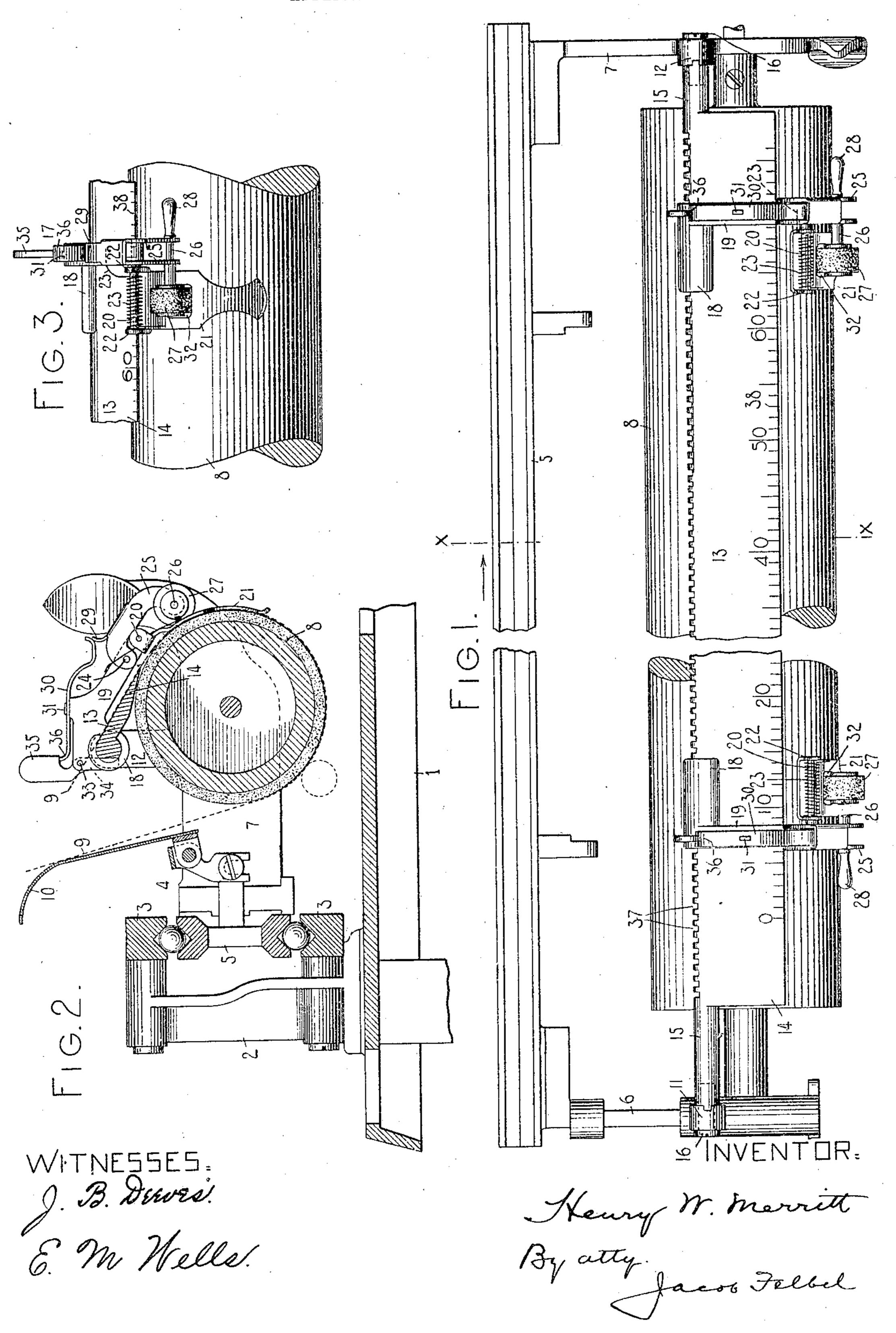
H. W. MERRITT.

TYPE WRITING MACHINE.

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UNITED STATES PATENT OFFICE.

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TYPE-WRITING MACHINE.

No. 808,771.

Specification of Letters Patent.

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To all whom it may concern:

Be it known that I, Henry W. Merritt, a citizen of the United States, and a resident of Syracuse, in the county of Onondaga and State 5 of New York, have invented certain new and useful Improvements in Type-Writing Machines, of which the following is a specification.

This invention relates to type-writing ma-10 chines, and has for its main objects to provide a support for the paper, on which erasures may readily and conveniently be made, and to provide a mounting for the means for guiding and holding the paper.

My invention consists in certain features of construction and combinations of devices, all as will hereinafter be described, and particularly pointed out in the concluding claims.

The invention is shown as embodied in the 20 Monarch type-writing machine, but it is to be understood that it may be adapted to other forms of writing-machines.

In the accompanying drawings, Figure 1 is a top plan view of the platen and platen-frame 25 of a type-writing machine, showing my invention embodied therein, certain parts being omitted and broken away for the sake of clearness. Fig. 2 is a sectional side elevation taken on the line x x of Fig. 1, and Fig. 3 is a frag-30 mentary front elevation of the platen and showing the invention in relation therewith.

In the drawings, 1 is the top plate of the machine, and 2 is one of the posts for the guiding and supporting rails 3 of the platen-carriage 35 4. The grooved back bar 5 of the platen-carriage cooperates with the rails 3 through roller-bearings, and the side bars 6 and 7 serve to support the platen 8. The paper, which is represented by the dotted line 9, is fed 40 around the platen in a manner well understood, passing into the machine over the papertable 10 at the rear of the platen. The side bars 6 and 7 are formed with standards or lugs 11 and 12, which serve to support the erasing-45 plate 13, which consists of a bar, blade, or plate 14 and a rod or shaft-like portion 15. The ends of the rod or shaft-like portion are formed with holes that are tapped to receive the headed screws 16, which pass through per-5° forations in the lugs 11 and 12 and are screwed tightly into the ends of the shaft-like portion. The erasing-plate is thus firmly secured in place, a tongue-and-groove connection with

the lugs 11 and 12 preventing its rotation or

lateral displacement. Mounted upon the erasing-plate are the marginal paper-fingers 17, each of which is composed of a supporting portion, a guiding and holding portion, and a feed-roll portion, the two latter parts being independently mounted 60 on the first-named part. The support of each marginal paper-finger is composed of a hublike portion 18, which is cut away or formed C-shaped, so that it may surround or embrace the rod-like part 15 of the erasing-plate, and 65 of an arm 19, projecting forwardly and over the erasing-plate from the hub-like portion and at a right angle to the latter, with which it is made integral. Driven into or otherwise suitably secured in the inner side of the 7° arm 19 is a short rod 20, upon which is mounted the paper guiding and holding member or finger proper, 21. The latter is pivoted on the rod 20 by means of perforated upturned ears 22 and is pressed toward the 75 platen by a spiral spring 23, which surrounds the rod 20. Pivoted upon the arm 19 at 24, slightly in the rear of the rod 20, is the rollholder 25, supporting at its forward end a fixed pivot-rod 26, upon which turns a feed- 80 roll 27. The roll-holder is provided with a handle 28, by which it and the roll may be turned up or down. The roll-holder is preferably made from a piece of sheet-metal so formed and bent as to produce a U-shaped 85 device having ears for the pivot 24 and bearings for the pin 26, the side members of the device being connected by a roof or crosspiece, the rearmost end of which is formed or fashioned into an ear or extension 29, lo- 90 cated above and forward of the axis of the roll-holder. Against this lug presses the forward end of a leaf-spring 30, the latter being. suitably attached, as by a rivet 31, to the arm 19. The pressure of the spring 30 maintains 95 the feed-roll 27 in frictional contact with the platen or the paper thereon. When it is desired to separate the feed-roll 27 from the platen, the former is turned up out of working position about its pivot 24 by means of 100 the handle 28 and is maintained in non-working position by the pressure of the forward end of the spring 30 against the end of the lug 29. This movement of the roll-holder and the feed-roll about the axis 24 is entirely 105 independent of the pivotal movement of the

guiding member 21 about its rod 20, and the pressure to which the said guiding member is subjected by its spring 23 is entirely independent of the pressure of the spring 30 on 5 the roll-holder. The guiding member 21 is cut away at 32 to permit the feed-roll 27 to contact with the platen, and the said guiding member may be rotated out of or into contact with the platen or paper without dis-10 turbing the feed-roll, just as the feed-roll may be turned into working or non-working position without disturbing the guiding mem-

ber 21. Pivoted at 33 in the arm 19 is a latch 34, 15 which enters a slot formed in the rear side of the hub 18. The upper portion of the latch terminates in a thumb-piece 35, with which the rear end of the spring 36 coacts, the pressure of the said spring serving to press the 20 lower part of the latch 34 forwardly about its pivot and into engagement with any one of a series of shallow vertical notches 37, constituting a rack, formed on the rear side of the erasingtable 14. The spring 36 is preferably formed 25 integral with the same strip of metal of which spring 30 is made, which is a convenient and economical construction, although the springs may be wholly separate as they perform each its own function. Either of the paper-fingers 30 may be released from engagement with the rack by forward pressure on the thumb-piece 35 and may then be slid along the erasingplate to any desired position longitudinally of the platen and again latched to the rack. 35 The erasing-plate may be graduated, as at 38, in correspondence with the graduations of the platen-scale (not shown) to facilitate the positioning of the paper-fingers, although this is not essential, and the notches 37 may be 40 formed to correspond also with the graduations of the platen-scale. The rack and the spring-latches afford a positive connection

45 ment of the paper-fingers. As best appears in Fig. 2, the erasing-plate is supported at a comparatively short distance above the platen and slightly to the rear of its axis, the blade or plate-like portion ex-50 tending downwardly and forwardly in the general direction of the delivery ends of the guiding portions 21 of the paper-fingers, so that as the paper is delivered from the machine it passes out over the face of the eras-

between the paper-fingers and the erasing-

plate which prevents any accidental displace-

55 ing-table and in close proximity to it. The erasing-plate, it will be noted, is held fixedly in the platen-carrier. The C-shaped hub-like portion of each of the marginal paper-fingers surrounds the rod or shaft-like portion of the

60 erasing-plate, and the ends of the C in each hub-like portion contact with the top and bottom surfaces of the blade of the erasing-plate. The result is that while the hub portion and the supporting-arm 19, integral therewith, may

65 move longitudinally of the erasing-plate they

have no motion transversely either of the latter or of the platen; but though the arm 19 is maintained in a fixed relation transversely of the platen, yet the feed-roll 27 and the guiding member 21, which are independently 70 spring-mounted on the arm 19, are capable of transverse movements in respect of the platen. The bodily movement of the marginal finger as an entirety is conveniently accomplished by the thumb-piece 35 after the latter has been 75 pulled forward to release the latch 34 from the rack. The spring-pressure of the latch 34 may be such as to hold the marginal paperfinger in adjusted position without the use of the notches 37. Furthermore, the hub por- 80 tion 18 may be of such length and may fit the shaft-like part of the erasing-table so closely as to properly hold the paper-finger, in which case the spring-pressed latch 34 may be dispensed with.

It is to be understood that the invention is not limited to the particular construction or arrangement herein shown and described, but that various changes may be made within its scope.

What I claim as new, and desire to secure by Letters Patent, is— 1. In a type-writing machine, the combina-

tion of a platen, an erasing-plate and a paperfinger provided with a latch, said paper-finger 95 being mounted on said erasing-plate, and said latch contacting with said erasing-plate.

2. In a type-writing machine, the combination of a platen, an erasing-plate, and a paperfinger provided with a spring-pressed latch, 100 said paper-finger being mounted on said erasing-plate and said latch being pressed by its spring against said erasing-plate.

3. In a type-writing machine, the combination of a platen, an erasing-plate, a paper-fin- 105 ger mounted on said erasing-plate, and means for positively maintaining a fixed relation between said paper-finger and said erasingplate.

4. In a type-writing machine, the combina- 110 tion of a platen, an erasing-plate, a rack, and a paper-finger, said paper-finger being mounted on said erasing-plate and having a latch engaging said rack.

5. In a type-writing machine, the combina- 115 tion of a platen, an erasing-plate, a rack, and a paper-finger, said paper-finger being mounted on said erasing-plate and having a springpressed latch engaging with said rack.

6. In a type-writing machine, the combina- 120 tion of a platen, an erasing-plate provided with a rack, and a paper-finger mounted on said erasing-plate and having a latch engaging with the rack of the latter.

7. In a type-writing machine, the combina- 125 tion of a platen, a toothed member, and a paper-finger provided with a pivoted latch having a spring-pressed finger-piece, said paperfinger being movable longitudinally of said toothed member and being held positively in a 13°

fixed relation with said toothed member by the latch of the paper-finger until the latter is swung out of engagement with said toothed member.

8. In a type-writing machine, the combination of a platen, a toothed member and a paper-finger provided with a pivoted latch, said paper-finger being movable longitudinally of and upon said toothed member and being held positively engaged with said toothed member by the latch until said latch is revolved out of the rack.

9. In a type-writing machine, the combination of a platen, an erasing-plate and a paper-finger mounted on said erasing-plate, said paper-finger comprising a supporting part, a feed-roll part and a holding and guiding part.

10. In a type-writing machine, the combination of a platen, an erasing-plate and a paper-finger mounted on said erasing-plate, said paper-finger comprising a supporting part, a feed-roll part and a holding and guiding part, the last two parts being independently pivoted on the first part.

11. In a type-writing machine, the combination of a platen, an erasing-plate and a paper-finger mounted on said erasing-plate, said paper-finger comprising a supporting part, a feed-roll part and a holding and guiding part, the last two parts being independently springmounted.

12. In a type-writing machine, the combination of a paper-feeding device and an erasing-plate formed with a blade portion and a toothed portion with which last portion the paper-feeding device coöperates.

13. In a type-writing machine, the combination of a platen, a platen-frame, a paper-finger mounted in said platen frame, said paper-finger comprising a supporting part, a feed-roll part and a guiding part, the last two parts being independently mounted on the first part, and springs, one of which is associated with each of said last two parts, each spring affecting only the part with which it is associated.

14. In a type-writing machine, the combination of a platen, a platen-frame and a paper-finger rigidly mounted transversely in said platen-frame, said paper-finger carrying an in-50 dependently-pivoted roll-holder and an independently-pivoted guiding member.

15. In a type-writing machine, the combination of a platen, a supporting-arm, as 19, slidably mounted longitudinally of said platen, 55 a roll-holder pivoted on said supporting-arm and provided with a lug, a spring coacting with said lug, a guiding member, as 21, pivoted on said supporting-arm independently of said roll-holder, and a spring acting solely on 60 said guiding member.

16. In a type-writing machine, the combination of a platen, a platen-frame, a supporting-arm, as 19, slidably mounted longitudinally of said platen, a retaining-latch pivoted 65 on said supporting-arm, a spring coacting with said retaining-latch, a roll-holder pivoted on said supporting-arm and provided with a lug, a spring coacting with said lug, a guiding member, as 21, pivoted on said supporting-70 arm independently of said roll-holder, and a spring acting solely on said guiding member.

17. In a type-writing machine, the combination of a platen, a platen-frame, a supporting-arm, as 19, slidably mounted longitudi- 75 nally of said platen, a retaining-latch pivoted on said supporting-arm, a spring, as 36, coacting with said retaining-latch, a roll-holder pivoted on said supporting-arm and provided with a lug, a spring, as 30, coacting with said lug, said spring 30 being integral with said spring 36, and a spring-mounted guiding member, as 21, pivoted on said supporting-arm independently of said roll-holder.

Signed at Syracuse, in the county of Onon-85 daga and State of New York, this 21st day of June, A. D. 1904.

HENRY W. MERRITT.

Witnesses:
EARL CRAMER,
W. C. COOK.